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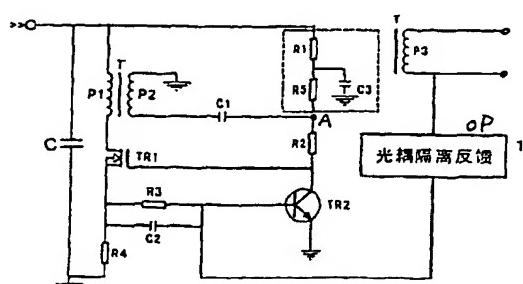
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(54) Title: AN ISOLATING TYPE SELF-OSCILLATING FLYBACK CONVERTER

(54) 发明名称: 隔离式自振荡反激变换器



1 OPTICAL COUPLED ISOLATING FEEDBACK

A1

(57) Abstract: An isolating type self-oscillating flyback converter is disclosed, which includes a coupled transformer, a FET, a transistor and an optical-electro coupled isolating feedback unit, wherein the input terminal of the circuit is connected to the source of the FET through a primary winding of the coupled transformer, the input terminal of the circuit is connected to the collector of the transistor through a resistor R1 and a resistor R2, the source of the FET is connected to the collector of the transistor, the drain of the FET is connected to the ground through a resistor and connected to the base of the transistor through the parallel connection of a resistor and a capacitor, the base of the transistor is connected to the output terminal of a secondary output winding of the coupled transformer through the optical-electro coupled isolating feedback unit; the series connection joint between the said resistor R1 and the resistor R2 is connected to the ground through a speedup capacitor and a secondary winding of the coupled transformer; a circuit for achieving the soft start is connected between the said input terminal of the circuit and the series connection joint. Thus the current of the invention is small and the converter can keep normal working when the input voltage is high.

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(57) 摘要

本发明公开了一种隔离式自振荡反激变换器，包括耦合变压器、场效应管、晶极管和光电耦合隔离反馈器，电路输入端经耦合变压器的初级线圈连接场效应管的源极，电路输入端经电阻R1和电阻R2连接晶极管的集电极，场效应管的源极与晶极管的集电极连接，场效应管的漏极一路经电阻接地，另一路经电阻和电容的并联体连接晶极管的基极，晶极管的基极经光电耦合隔离反馈器连接耦合变压器的次级输出绕组的输出端；所述电阻R1和电阻R2之间的串接点经加速电容、耦合变压器的次级绕组接地；所述电路输入端和串接点之间连接有用于实现电路软启动的回路。本发明启动电流小，在输入电压较高时也能保持正常工作。